



Biography

Department of the Army



Dr. Augustus Way Fountain III
Senior Research Scientist (Chemistry)
Research and Technology Directorate
Edgewood Chemical Biological Center
U.S. Army Research, Development, and Engineering
Command
Aberdeen Proving Ground, Maryland



Dr. Augustus Way Fountain III is a member of the Scientific and Professional (ST) cadre of the Senior Executive Service and serves as the Senior Research Scientist for Chemistry within the Research and Technology Directorate, Edgewood Chemical Biological Center. Selected to this position in December 2007, he is responsible for planning, leading, and conducting cutting edge research in chemical defense related to the Research and Technology Directorate, Edgewood Chemical Biological Center, Department of Army, and Department of Defense missions. He is an internationally recognized expert in electro-optics as it pertains to chemical, biological, radiological, nuclear and explosives (CBRNE) sensing and provides advice to government agencies for developing schedules and milestones for analytical chemistry and nanoscience projects to ensure appropriate emphasis on emerging technologies. Dr. Fountain led an Army Technology Objective that leverages existing and emerging chemical detection technologies to specifically detect the chemical signatures of military and homemade explosives. Most recently Dr. Fountain deployed to Iraq as a civilian scientist, advising the CEXC labs on the forensic analysis of explosives residues. Additionally, Dr. Fountain serves as an at-large representative of the United States to the NATO Sensors & Electronics Technology Panel advising them on CBRNE detection. He retired from the Army after 22 years of active duty where he last served as a Professor of Chemistry in the Department of Chemistry and Life Science at the United States Military Academy. Dr. Fountain's research involves the applications and development of Raman spectroscopy; the use of remote optical sensing for the detection of chemicals, biological agents and explosives; hyperspectral remote sensing; and the development of polymeric micro-sensors.

CAREER CHRONOLOGY:

- Dec 2007 – present: Senior Research Scientist (ST) for Chemistry, Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD
- Sept 2006 – Dec 2007: Senior Research Scientist (HQE) for Electro-Optics, Edgewood Chemical Biological Center, Aberdeen Proving Ground, MD
- Aug 2004 – Aug 2006: Professor of Chemistry, United States Military Academy, West Point, NY
- Jul 2000 – Aug 2004: Director, Photonics Research Center, United States Military Academy, West Point, NY
- Jul 1994 – Jul 2000: Academy Professor, United States Military Academy, West Point, NY

- Jun 1991 – Aug 1992: Commander, 21st Chemical Company, 82nd Airborne Division, Ft. Bragg, NC
- Aug 1990 – Jun 1991: Chemical Officer, 504th Parachute Infantry Regiment, 82nd Airborne Division, Ft. Bragg, NC
- Aug 1987 – Mar 1990: Chemical Officer, 1st Ranger Battalion, Hunter Army Airfield, GA
- Oct 1985 – Aug 1987: Chemical Officer, 3rd Battalion, 19th Infantry (Mechanized), 24th Infantry Division, Ft. Stewart, GA

COLLEGE:

- Ph.D., Chemistry, The Florida State University, Tallahassee, FL, 1997
- MSS, National Strategic Studies, The United States Army War College, Carlisle, PA, 2004
- BS, Chemistry, Stetson University, DeLand, FL, 1985

SIGNIFICANT TRAINING:

- Command and General Staff Officers College (Resident), 1998
- Combined Arms and Services Staff School, 1995
- Chemical and Nuclear Target Analysis Course, 1990
- Chemical Corps Officer Advanced Course (Honor Graduate), 1990
- Jungle Expert Course, 1988
- Jumpmaster Course, 1988
- Ranger Course, 1987
- Chemical Corps Officer Basic Course (Honor Graduate), 1985
- Airborne Course, 1982

AWARDS AND HONORS:

- Distinguished Alumnus, Stetson University, 2006
- Legion of Merit
- Superior Civilian Service Award

PROFESSIONAL MEMBERSHIPS AND ASSOCIATIONS:

- Society for Applied Spectroscopy
- American Chemical Society
- The International Society for Optical Engineering (SPIE)
- Optical Society of America (Senior Member)
- 75th Ranger Regiment Association

SELECTED PUBLICATIONS:

- Guicheteau, J. A.; Swofford, H.; Tripathi, A.; Wilcox, P. G.; Emmons, E. D.; Christesen, S. D.; Wood, J.; Fountain, A. W. III, Sequential Raman Chemical Imaging and Biometric Analysis on Fingerprints for Rapid Identification of Threat Materials and Individuals, *Journal of Forensic Identification*, 63 (1), 2013, 90-101.
- Gregory Mogilevsky, Laura Borland, Mark Brickhouse, and Augustus W. Fountain III, Raman Spectroscopy for Homeland Security Applications, *International Journal of Spectroscopy*, Volume 2012 (2012), Article ID 808079, doi:10.1155/2012/808079.
- Kunz, R. R.; Gregory, K. E.; Aernecke, M. J.; Clark, M. L.; Ostrinskaya, A.; Fountain, A. W., Fate Dynamics of Environmentally Exposed Explosive Traces. *The Journal of Physical Chemistry A*, 2012, 116, (14), 3611-3624.
- William F. Pearman and Augustus W. Fountain III “Classification of Chemical and Biological Warfare Agent Simulants by Surface Enhanced Raman Spectroscopy and Multivariate Statistical Techniques”, *Appl. Spectrosc.* 60, 4, 2006, 356 – 365.
- Augustus W. Fountain III, “Transforming Defense Basic Research Strategy”, *Parameters*, XXXIV, 4, 2004, 40 – 54.